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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,701	04/10/2001	Rajarshi Das	YOR20010151US1	1772
35195	7590	08/26/2004	EXAMINER	
FERENCE & ASSOCIATES 400 BROAD STREET PITTSBURGH, PA 15143			KYLE, CHARLES R	
			ART UNIT	PAPER NUMBER
			3624	

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/829,701	<b>Applicant(s)</b> DAS ET AL.	
	<b>Examiner</b> Charles R Kyle	<b>Art Unit</b> 3624	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 May 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

**ETAILED ACTION**

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 4 and 29** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. They recite the phrase "...and a sufficient change in parameters relating to a user." One of ordinary skill in the art of auctions would not know what constitutes a "sufficient" change to cause a trigger of execution.

**Claims 27-29 and 31-45** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. They recite that the apparatus comprises "arrangements" for performing various functions. Broadly construed, a series of method steps can constitute and "arrangement"; the nature of the claimed inventions as apparatus is unclear.

**Claim 24** depends from cancelled Claim 30 and is rejected.

***Claim Rejections - 35 USC § 101***

The rejection of Claims 47-49 of the prior Office Action under 35 USC 101 is withdrawn. For the record, the Examiner understands that in each of these Claims, Applicants claim a program storage device tangibly embodying program instructions to perform a set of method steps, rather than claiming just the method steps themselves.

***Claim Rejections - 35 USC § 103***

**Claims 1-4, 6-7,9, 12-17, 21-23, 25-29, 31-40,43-45, 47 and 49** are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,285,989 *Shoham* in view of US 2002/0038282 *Montgomery*.

**With respect to Claim 1**, *Shoham* discloses the invention substantially as claimed including in a method of facilitating automatic participation in an electronic auction (Summary of the Invention), the steps of:

obtaining information relating to an auction including information about parameters relating to a user prior to the beginning of an auction (Col. 9, lines 47-59) and information about an ongoing auction including information about the auction type (Col. 5, line 65 to Col. 6, line 51) and auction rules relating to the auction (Col. 8, lines 33-38; Col. 12, lines 27-37);

choosing an order computation method;  
computing an order (Col. 8, lines 50-58; Col. 10, lines 46-54); and  
placing the computed order.

*Shoham* does not specifically disclose that the order computation is done taking into account parameters relating to a user and the information about the ongoing auction. Note that *Shoham* discloses this activity in the context of proxy bidding. *Montgomery* discloses the limitation in the context of computing a proxy bid, a computed order, at para. 72. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify *Shoham* with the detailed proxy computation based on user and auction parameters of

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*Montgomery* because this would provide the detailed algorithm to calculate a proxy type bid/order. See also *Montgomery* at paras. 59 and 68 and *Shoham* at Fig 1.

Further, Official Notice is taken that it was old and well known to obtain parameters related to a user prior to an auction. For example, it would be necessary to register persons seeking to participate in an auction and to obtain information related to their qualification to participate in the auction. At the very least, it would be necessary to obtain parameters from a user (seller) who wishes to sell an item at auction so as to know who the seller was and what was to be auctioned. It would have been obvious to one of ordinary skill in the art at the time the invention was made to obtain user information as in *Shoham* because this would provide minimal information on a user to facilitate the auction.

**With respect to Claim 2**, *Shoham* discloses placement of revised orders at Col. 2, lines 11-34.

**As to Claims 3 and 4**, *Shoham* does not specifically disclose periodic performance of the recited steps. Official Notice is taken that it is old and well known to allow traders to provide market activity message, such as those to increase a trader's maximum bid in a further attempt to win an auction. For instance, allowing a bidder to increase such a maximum bid would provide him/her with flexibility in bidding in the event that bidding rose above the trader's previous maximum. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify *Shoham* to allow market activity messages such as one to raise a maximum bid because this would provide for trader flexibility.

**Concerning Claim 6**, *Shoham* discloses appropriate order computation for auction type and rules at Col. 13, lines 3-13.

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**Concerning Claim 7**, *Shoham* discloses provision of auction rule and type information from an auctioneer via a message at Col. 14, lines 17-24, Col. 14, lines 36-61 and Fig. 7.

**With respect to Claim 9**, *Shoham* discloses an order queue at Col 12, line 66 to Col. 13, line 1.

**As to Claim 12**, *Shoham* does not specifically disclose a user's limit price. *Montgomery* discloses this limitation at paras. 68-69 and Fig. 11. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify *Shoham* with the user limit price feature of *Montgomery* because this would provide control of maximum bid price to the user, assuring that the electronic auction did not proxy bid too much on behalf of the user. See also *Shoham* at Col. 7, lines 55-56.

**With respect to Claim 13**, the limitation is addressed in the rejection of Claim 1; the recitation in Claim 13 is redundant.

**As to Claim 14**, *Shoham* discloses obtaining market activity information from an auctioneer at Col. 14, line 61 to Col. 15, line 8.

**Concerning Claim 15**, see the discussion of Claim 4.

**Concerning Claim 16**, *Shoham* discloses deciding on the viability of an order at Col. 7, lines 57-59.

**As to Claim 17**, *Shoham* does not specifically disclose ascertaining legality of an order. *Montgomery* discloses this limitation at Fig. 11, ele. 1106 and paras. 82-83.

**With respect to Claims 21 and 22**, *Shoham* discloses aggregation of ongoing auction information into a market history at Col. 15, lines 17-20.

**Concerning Claim 23**, *Shoham* does not disclose augmenting auction history with information from previous auctions. Official Notice is taken that expansion of historical databases for better decision making is old and well known. For example, large sample populations for statistical inference provide greater probability of correct inference. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify *Shoham* by augmenting with previous auction data because this would provide a greater likelihood for traders to understand their market.

**With respect to Claim 25 and 26**, see the discussion of Claim 1 and Note that *Shoham* functions in the “automatic” environment of the Internet.

**With respect to Claim 27**, it is an apparatus form of Claim 1 and is rejected in alike manner.

**As to Claim 28**, see the discussion of Claims 27 and 3.

**As to Claim 29**, see the discussion of Claims 28 and 4

**As to Claims 31-33**, see the discussion of Claim 27, and 6-8 respectively.

**As to Claim 34**, see the discussion of Claims 27 and 9. For purposes of examination it is assumed that Applicants’ intend that Claim 34 depend form claim 27 rather than cancelled Claim 30.

**As to Claim 35-36**, see the discussion of Claims 27 and 1.

**As to Claim 37**, see the discussion of Claims 35 and 12.

**As to Claim 38**, see the discussion of Claims 27 and 14.

**As to Claim 39-40**, see the discussion of Claims 27 and 16-17.

**As to Claim 43-45**, see the discussion of Claims 27 and 21-23.

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**With respect to Claim 47**, see the discussions set forth above and note that *Shoham* discloses a program storage device for his method at Fig. 2.

**Concerning Claim 49**, see the discussion of Claims 1 and 47 above.

**Claims 18-20, 24, 41-42, 46 and 48** are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,285,989 *Shoham* in view of US 2002/0038282 *Montgomery* and further in view of *Price Formation in Double Auctions* by Gjerstaed and Dickhaut, already of record, hereinafter, *Price Formation*.

**As to Claim 18**, *Shoham* discloses the invention substantially as claimed. See the discussion of Claim 1. *Shoham* does not specifically disclose the computation of a belief function in auction order development. *Price Formation* discloses this feature at Sections 2.4.2 to 2.4.6. The essence of the disclosure of *Price Formation* is that it is possible to quantify traders' assessment of order success in an effort to maximize trader surplus as set forth at Example 3 of Section 2.4.6. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify *Shoham* with the use of the belief functions of *Price Formation* because this would provide a formalized method to help maximize trader surpluses on particular trades.

**Concerning Claim 19**, *Price Formation* discloses likelihood of successful trade within a range of order values at Section 2.4.6, Example 3, portion where  $p(a)=\dots$



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**With respect to Claim 20**, see the discussion of Claims 18 and 16. The use of a belief function would be obvious to choose a computation method because this would have provided probabilities that a given computation method would result in a successful order.

**Concerning Claim 24**, see the discussion of Claims 1 and 18.

**Concerning Claims 41 and 42**, see the discussion of Claims 27 and 18 and 20 respectively.

**Concerning Claim 46**, see the discussion of Claims 1 and 18.

**Concerning Claim 48**, see the discussions of Claims 1 and 18 and 47..

**Claims 8 and 33** are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,285,989 *Shoham* in view of US 2002/0038282 *Montgomery* and further in view of US 6,161,099 *Harrington et al.*

**As to Claim 8**, *Shoham* discloses the invention substantially as claimed. See the discussion of Claim 1. *Shoham* does not specifically disclose a prompt to obtain information from an auctioneer. *Harrington* discloses this limitation at Fig. 8 and related text. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify *Shoham* with the prompt of *Harrington* because this would indicate to a user/trader requirements and opportunity to obtain auction information.

**As to Claim 33**, see the discussion of Claims 32 and 8.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles R Kyle whose telephone number is (703) 305-4458. The examiner can normally be reached on M-F 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent A Millin can be reached on (703) 308-1065. The fax phone number for the organization where this application or proceeding is assigned is 703-305-7687.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



crk

August 22, 2004



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